

# SMA4021

PNP ダーリントン  
フライホイールダイオード内蔵

外形図⑧...SMA

## 絶対最大定格

( $T_a = 25$ )

記号	定格	単位
$V_{CB0}$	- 60	V
$V_{CEO}$	- 60	V
$V_{EBO}$	- 6	V
$I_c$	- 3	A
$I_{CP}$	- 6 (PW 1ms, $D_u$ 50%)	A
$I_B$	- 0.5	A
$I_F$	- 6 (PW 0.5ms, $D_u$ 25%)	A
$I_{FSM}$	- 8 (PW 10ms, 単発)	A
$V_R$	100	V
$P_T$	4 ( $T_a = 25$ )	W
	20 ( $T_c = 25$ )	
$T_j$	150	
$T_{stg}$	- 40 ~ + 150	

## 電気的特性

( $T_a = 25$ )

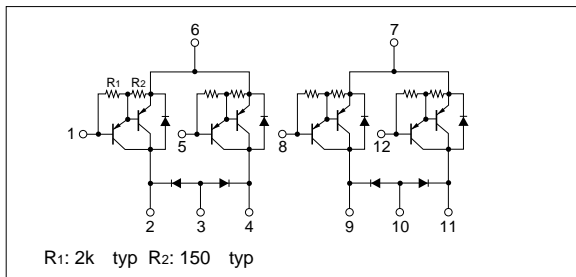
記号	規格値			単位	条件
	min	typ	max		
$I_{cBO}$			- 10	$\mu A$	$V_{CB} = - 60V$
$I_{EBO}$			- 10	mA	$V_{EB} = - 6V$
$V_{CEO}$	- 60			V	$I_c = - 10mA$
hFE	2000	5000	12000		$V_{CE} = - 4V, I_c = - 2A$
$V_{CE(sat)}$			- 1.5	V	$I_c = - 2A, I_B = - 4mA$
$V_{BE(sat)}$			- 2.0	V	

## フライバック電圧吸収用ダイオード

( $T_a = 25$ )

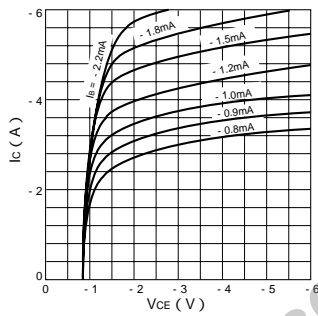
記号	規格値			単位	条件
	min	typ	max		
$V_R$	100			V	$I_R = 10 \mu A$
$V_F$			1.2	V	$I_F = 1A$
$I_R$			10	$\mu A$	$V_R = 100V$
trr		100		ns	$I_F = \pm 100mA$

## 等価回路図

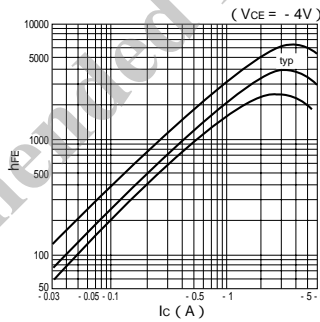


## 特性曲線

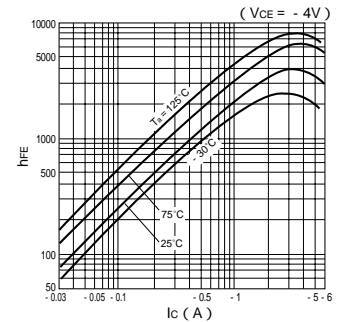
$I_c$ - $V_{CE}$ 特性 (代表例)



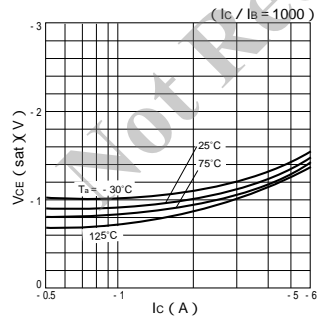
hFE- $I_c$ 特性 (代表例)



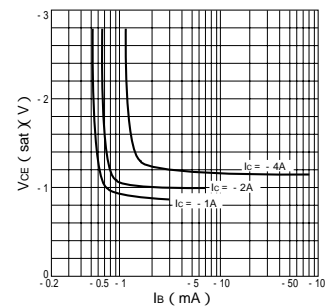
hFE- $I_c$ 温度特性 (代表例)



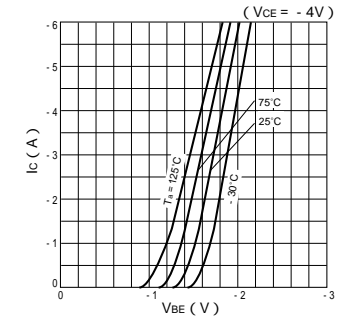
$V_{CE(sat)}$ - $I_c$ 温度特性 (代表例)



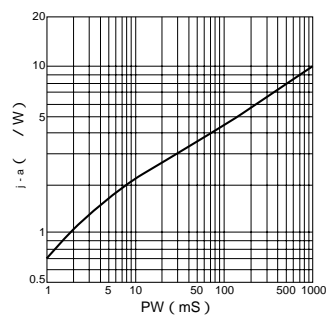
$V_{CE(sat)}$ - $I_B$ 特性 (代表例)



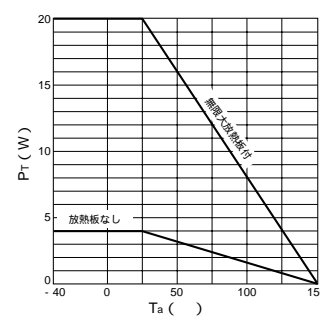
$I_c$ - $V_{BE}$ 温度特性 (代表例)



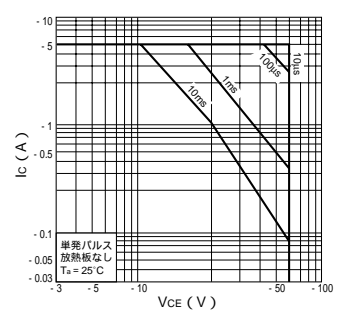
j-a-PW特性



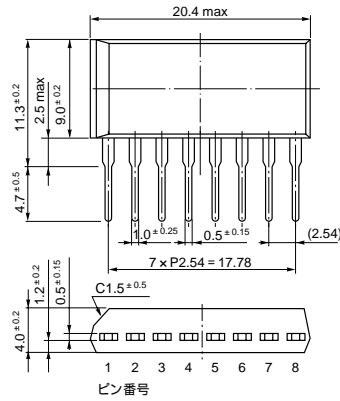
$P_T$ - $T_a$ 特性



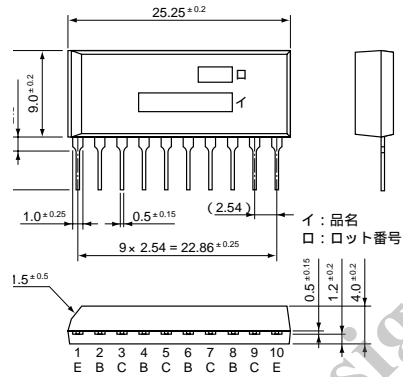
ASO特性



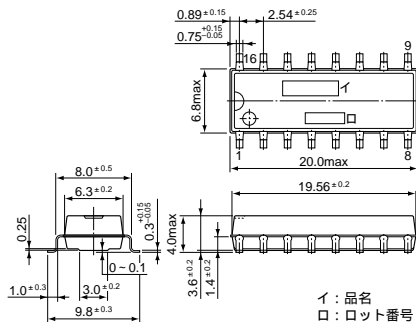
・ STA 8 pin (SIP8Pin)



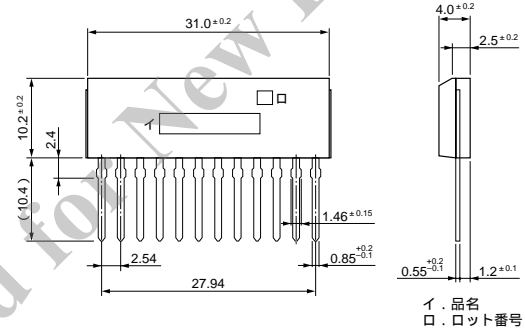
・ STA 10 pin (SIP10Pin)



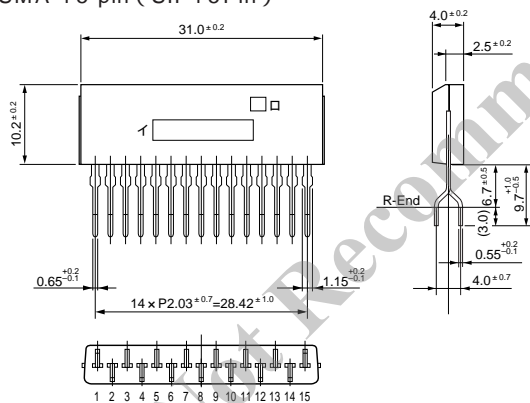
・ SD 16 pin (SMD16Pin)



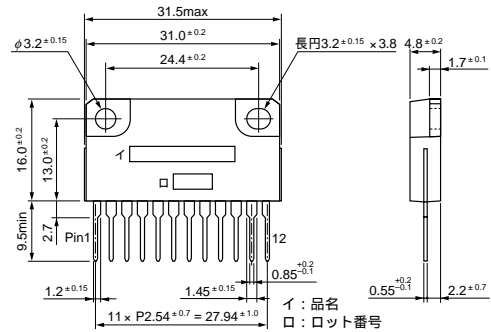
・ SMA 12 pin (SIP12Pin)



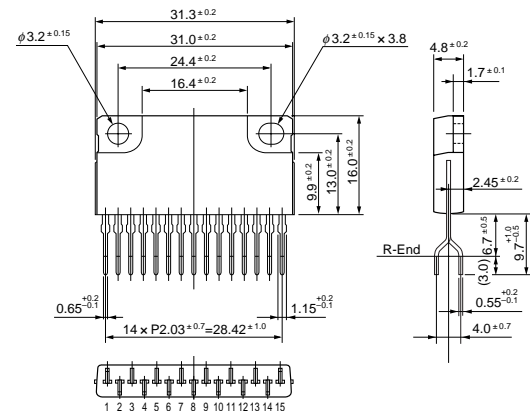
・ SMA 15 pin (SIP15Pin)



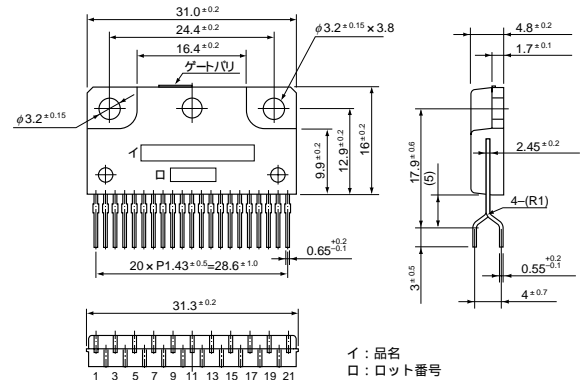
・ SLA 12 pin (SIP12Pin フィン付)



・ SLA 15 pin (SIP15Pin フィン付)



・ SLA 21 pin (SIP21Pin フィン付)



(単位: mm)